

REMARKS/ARGUMENTS

Claims 1-24 stand rejected in the outstanding Official Action. Claim 24 has been cancelled without prejudice and claims 1, 2 and 22 amended. Accordingly, claims 1-23 are the only claims remaining in this application.

The Examiner's acknowledgment of PTO acceptance of the originally filed formal drawings is very much appreciated. Additionally, the Examiner's acknowledgment of Applicants' claim for foreign priority and receipt of the certified copy of the priority document is appreciated. Finally, the Examiner's consideration of Applicants' previously submitted Information Disclosure Statement is appreciated and, even though the Examiner has crossed through the submitted copies of the International Search Report, the European Search Report and the GB Search Report (which were included with the IDS), the Examiner's confirmation that he considered and then crossed through these references on March 21, 2007 (the consideration date) is very much appreciated.

Claim 24 stands rejected under 35 USC §112 (second paragraph) as being indefinite. Claim 24 has been cancelled without prejudice, thereby obviating the rejection.

Claims 22-24 stand rejected under 35 USC §102 as being anticipated by John et al (U.S. Patent 3,022,870). Applicants have amended independent claims 1 and 22 to clearly recite that the present invention includes the polysulphide sealant being cured on at least one mating surface prior to joining of the surfaces. It is noted that in a preferred embodiment of the present invention, the previously cured polysulphide sealant is the only material joining the two components after the pressure applying step.

The John reference fails to disclose the claimed subject matter. While the Examiner alleges that the John's figure and column 1, lines 10-20, column 2, lines 63-72, column 3, lines 1-23 and column 4, lines 41-57 discloses "both mating surfaces have a layer of cured polysulphide sealant thereon" this is an incorrect statement. If the Examiner had stated that these surfaces are or were in contact with a layer of cured polysulphide sealant, the Examiner's observation would be correct. However, this is not what the Examiner says.

The teaching of the John reference clearly indicates that the polysulphide sealant is cured with polyethylene film slipsheets on each of its surfaces (see column 2, line 55 through column 3, line 4) and that such curing is done prior to application to the surfaces to be mated. In fact, John specifically suggests that the polysulphide sealant is to be cured before it is placed in contact with the surface to which it is to be adhered (column 3, lines 5-23). Moreover, evidence seems to indicate that curing is not completed when the John mating surfaces contact each other but this has not been alleged by the Examiner.

Neither of the John teachings suggest or teach curing the polysulphide sealant on at least one of the mating surfaces and then, only after curing has taken place, the mating surfaces contact each other. Thus, not only does John fail to teach curing the sealant on at least one mating surface, it actually teaches away from this, in that it suggests curing the polysulphide material prior to even placing it in contact with either of the mating surfaces. This John teaching is confirmed by the cited portion of column 4, i.e., at lines 41-57. The cured sealant covered with a "removable polyethylene slipsheet" is stored on rolls until needed. This confirms that it is applied to a mating surfaces only long after curing of the sealant.

In order to support a rejection under 35 USC §102, the John reference must teach each method step and any specified interrelationship of method steps. Here, the claim requires the step of “bringing together the mating surfaces” only “after allowing said sealant to cure.” The John reference clearly teaches allowing the sealant to cure before bringing the mating surfaces together and therefore it not only fails to teach the interrelationship of the curing step prior to the bringing together of the mating surfaces step, but actually would lead one of ordinary skill in the art directly away from Applicants’ claimed invention.

As a result, John fails to anticipate or render obvious the subject matter of claims 22 and 23 and therefore any further rejection thereunder is respectfully traversed. As noted above, claim 24 has been cancelled without prejudice.

Claims 1-10, 14(1-10), 20 and 21-24 stand rejected under 35 USC §103 as unpatentable over John in view of any one of Cheron (FR 2498671), Ishiara (JP 11072999), Hanson (U.S. Patent 4,697,970) or Fournier (U.S. Patent 4,106,184) and Nakamura (JP 03292796). Inasmuch as this rejection incorporates the John reference, the above comments with respect to the John reference are herein incorporated by reference.

The Examiner appears to allege that John teaches the application of sealant to a mating surface and then curing the sealant on the surface and references the above portions of the John reference which have already been discussed in conjunction with the anticipation rejection. The above discussion as to why John does not teach the steps of claim 1 is herein incorporated by reference. However, the Examiner’s admission that “John et al. teach the cured polysulphide sealant is applied to at least one of the mating surfaces by forming a sealant film between two protective coverings” confirms that the curing is between the two protective coverings and not on

at least one of the mating surfaces and is very much appreciated. This is precisely the teaching disclosed in the paragraph bridging columns 2 and 3 of the John reference and the Examiner's admission confirming this interpretation is very much appreciated. Of course, the import of this admission is that John teaches away from Applicant's claimed method step in which the polysulphide sealant is applied to at least one mating surface and then cured before bringing together the mating surfaces. As noted above, this teaching in John would clearly lead one of ordinary skill in the art away from Applicants' claimed invention.

The Examiner also admits that "John et al. are silent as to applying the polysulphide sealant directly to at least one of the mating surfaces without first forming a sealant film" thereby confirm the above analysis showing that John does not teach this claimed interrelationship between steps. Again, this is a further admission that such teaching would lead one of ordinary skill in the art away from applying the polysulphide sealant directly to one of the mating surfaces and then curing the polysulphide sealant before actually mating the two surfaces.

The Examiner on page 4 alleges that it is "well taken in the art" that there are two functionally equivalent techniques for providing an adhesive sealant between mating surfaces. Applicants refer to the Manual of Patent Examining Procedure (MPEP) Section 2144.03 which states that "if the applicant traverses such an assertion [of some fact being well known] the examiner should cite a reference in support of his or her position." Applicants traverse the Examiner's contention that there are "two functionally equivalent techniques available for providing an adhesive/sealant between the mating surfaces of components."

The Examiner's contention is respectfully traversed, as, even though the Examiner cites any one of the Cheron, Ishiara, Hanson, Fournier and Nakamura references, not one of those

references contains any teaching of curing a polysulphide sealant prior to bringing together the mating surfaces. Each one of the references either teaches an uncured sealant or adhesives that are applied which are not cured until after the mating surfaces are brought together.

Thus, because the John reference teaches away from pre-assembly curing of materials and none of Cheron, Ishiara, Hanson, Fournier or Nakamura teach post-curing assembly, both of which are required by Applicants' independent claims 1 and 22, even if the references were combined as suggested by the Examiner, they cannot render obvious the subject matter of independent claims 1 and 22 or claims dependent thereon.

Moreover, under the provisions of 35 USC §103, the Court of Appeals for the Federal Circuit has consistently held that where the primary reference, John, teaches away from the claimed invention, this is a clear indicia of non-obvious and thus any further suggestion that the combination of John and any one of the cited references renders obvious the claims is respectfully traversed.

Claims 11-13, 14(11-13) and 15 stand rejected under 35 USC §103 as unpatentable over John in view of any one Cheron, Ishiara, Hanson, Fournier and Nakamura, further in view of Smith (U.S. Patent 3,659,896). Inasmuch as claims 11-15 all depend ultimately on independent claim 1, the above comments regarding John by itself or in combination with any one of Cheron, Ishiara, Hanson, Fournier and Nakamura are herein incorporated by reference.

The Examiner does not allege that Smith contains the teaching of claim 1 missing from all previously cited references, i.e., requiring sealant curing prior to joining mating surfaces. The Examiner does not allege that Smith teaches pre-assembly curing of a layer of polysulphide sealant and therefore Smith adds nothing to the teaching previously discussed.

Because no cited reference or combination of references teaches post-curing assembly of mating surfaces, there is simply no suggestion that independent claim 1 or claims 11-15 dependent thereon are obvious in view of 35 USC §103. Moreover, because the John reference specifically teaches away from post-curing assembly and instead requires pre-curing assembly, the reference clearly teaches away from Applicants' claimed invention.

Claims 16-19 stand rejected under 35 USC §103 as unpatentable over John and any one of the previously cited references, further in view of Akmal ("Handbook of Adhesive Technology"). Inasmuch as claims 16-19 ultimately depend from claim 1, the above comments regarding John, Cheron, Ishiara, Hanson, Fournier and Nakamura are herein incorporated by reference.

The Examiner correctly notes that Akmal relates to polysulphide sealants and adhesives and the use of transition metal oxide compounds to aid in curing. However, the Examiner does not allege that Akmal teaches the claimed invention of post-cure assembly of mating surfaces and therefore none of the cited prior art references contain this claimed disclosure. Moreover, none of the cited prior art references contain any suggestion as to why one of ordinary skill in the art would ignore the contrary teachings of John, i.e., for curing after the surfaces have been mated, rather than before.

Applicants also rely upon the provisions of MPEP Section 2144.03 with respect to the Examiner's contention that "it is extremely well known to cure polysulphide sealants" to the extent the Examiner believes this to teach pre-assembly curing. Such is simply not discussed in the Akmal reference, nor has the Examiner identified any alleged discussion. As a result, the

Examiner has not met his burden of showing pre-assembly curing of polysulphide materials on a mating surface and any further rejection thereunder is respectfully traversed.

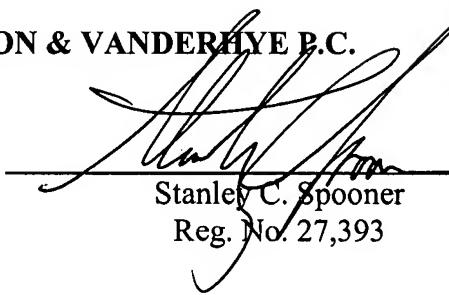
Claims 22-24 stand provisionally rejected on the ground of non-statutory obviousness-type double patenting over co-pending Application 11/020,873. Applicants appreciate the Examiner's admission that "the conflicting claims are not identical" and, if one of the two applications issues, then a non-statutory obviousness-type double patenting rejection might ensue. Applicants respectfully traverse the contention at this point and, as noted in the MPEP, where both applications are still pending and there is no other basis for rejection, the Examiner should permit the present application to pass to issue and then apply a non-statutory obviousness-type double patenting rejection to the co-pending application. Therefore, Applicants respectfully traverse the rejection of claims 22 and 24.

Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that claims 1-23 are in condition for allowance and notice to that effect is respectfully solicited. In the event the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, he is respectfully requested to contact Applicants' undersigned representative.

WEST et al.
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Respectfully submitted,

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